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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,376	11/30/2000	Yutaka Kobayashi	200197US0XPC	1263
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OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC FOURTH FLOOR 1755 JEFFERSON DAVIS HIGHWAY			EXAMINER	
			SHOSHO, CALLIE E	
ARLINGTON	N, VA 22202		ART UNIT	PAPER NUMBER
			1714	
			DATE MAILED: 09/09/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
·		09/701,376	KOBAYASHI ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Callie E. Shosho	1714			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	December to a communication (a) filed on 40	h				
1)						
2a)□	•	his action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
•	Claim(s) 1-6 is/are pending in the application	l .				
4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.					
•	6)⊠ Claim(s) <u>1-6</u> is/are rejected.					
•	Claim(s) is/are objected to.					
•	Claim(s) are subject to restriction and/	or election requirement.				
Application Papers						
9) 🗌 .	The specification is objected to by the Examin	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) ☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 						
Attachment(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

DETAILED ACTION

1. All outstanding rejections are overcome by applicants' amendment filed 6/18/02. Further, applicants' submission of a new abstract overcomes the objection of record with respect to the abstract.

The following rejection is non-final in light of new grounds of rejection as set forth in paragraphs 5-6 below.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 4-6 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Newly added claims 4-6 recite "consisting essentially of" transitional language. It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the phrase "consisting essentially of" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Examiner has not found any support for this phraseology in the specification as originally filed.

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It is noted that by limiting the claims to "consisting essentially of", the composition cannot contain any other ingredients, beside those claimed, which materially affect the basic and novel characteristics of the specified material. Applicants point to the original claims as well as the examples as set forth on pages 15-17 of the present specification as support for the use of "consisting essentially of" transitional language in claims 4-6. However, it is the examiner's position that there is nothing in the original claims, which all recite "comprising" transitional language, that supports reciting "consisting essentially of" transitional language, i.e. narrowing the scope of the claims. Further, it noted that all the examples in the specification disclose a composition containing the claimed ingredients, <u>as well as</u> neutralizing agent, magnesium-aluminum-hydroxide-carbonate-hydrate, and antioxidant, which will clearly effect the basic and novel characteristics of the ink.

Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims (\$\oldsymbol{9}\) are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 699711 in view of Kamakura et al. (U.S. 5,543,454), Shimijo et al. (U.S. 6,011,102), Watanabe (U.S. 4,621,114), and Sumitomo et al. (U.S. 6,201,090).

EP 699711 disclose a resin composition for automobile parts comprising (i) propyleneethylene block copolymer wherein the copolymer comprises propylene homopolymer which has Application Number: 09/701,376

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stereoregularity index [mmmm] fraction, i.e. isotactic pentad fraction, of 98.5% or greater and 5-25% ethylene-propylene copolymer and (ii) nucleating agent as seen in the formula below:

which is identical to the nucleating agent presently claimed when R_2 and R_3 are each t-butyl, R_1 is methylene, and M is sodium. The nucleating agent is present in an amount of 0.05-0.4 parts per 100 parts polymer present in the composition or in an amount of 0.0005-0.004 parts per part polymer which clearly overlaps the claimed amounts of 0.0003 (300/1,000,000)-0.002(2000/1,000,000) parts nucleating agent per part polymer (page 1, lines 52-53, page 4, lines 6-12 and 22, page 5, lines 14-40, and page 6, lines 1-3).

Although there is no explicit disclosure of xylene insoluble or xylene soluble as presently claimed, it is well known as found in col.2, lines 42-43 and 56-57 of Kamakura et al. that for a propylene-ethylene block copolymer comprising a propylene homopolymer portion and an ethylene-propylene copolymer portion, that the xylene insoluble is the propylene homopolymer

portion and the xylene soluble is the ethylene-propylene copolymer portion. Thus, it is clear that EP 699711 disclose xylene insoluble and xylene soluble as presently claimed.

Although there is no explicit disclosure of the flexural modulus, elongation, or Izod impact strength as presently claimed, given that EP 699711 discloses composition identical to that presently claimed, i.e. comprising the same propylene-ethylene block copolymer and nucleating agent, it is clear that such composition would intrinsically possess the same flexural modulus, elongation, or Izod impact strength as presently claimed.

The difference between EP 699711 and the present claimed invention is the requirement in the claims of (a) granulation, (b) melt flow rate, and (c) relaxation time of xylene soluble.

With respect to difference (a), while there is no explicit disclosure of granulation, it is noted that page 6, line 6 of EP 699711 discloses that the composition is mixed using an extruder.

Watanabe, which is drawn to propylene composition comprising propylene-ethylene block copolymer, disclose that mixing such a composition in an extruder will result in granulation (col.8, lines 2-3).

In light of the disclosure of Watanabe, it is clear that EP 699711 does in fact disclose granulation as presently claimed, and thus one of ordinary skill in the art would have arrived at the claimed invention.

With respect to difference (b), Shimijo et al., which is drawn to propylene resin composition comprising propylene-ethylene block copolymer, disclose that such a composition has melt flow rate (MFR)of 15-25 g/10 min, wherein if the MFR is too low, a composition having good flowability and moldability cannot be obtained, while if the MFR is too high, a composition having good impact strength cannot be obtained (col.6, lines 4-9).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use composition in EP 699711which has MFR, including that presently claimed, in order that the composition have good flowability, moldability, and good impact strength, and thereby arrive at the claimed invention.

With respect to difference (c), while EP 699711 discloses propylene-ethylene block copolymer comprising xylene soluble, there is no disclosure of the relaxation time and thus no disclosure that the relaxation time is a single component or related to the ethylene content as presently claimed.

On the one hand, given that EP 699711 disclose a composition comprising propyleneethylene block copolymer with same content of xylene soluble as presently claimed, it would have been natural for one of ordinary skill in the art to infer that the xylene soluble of EP 699711 intrinsically possesses single relaxation time component and relationship between relaxation time and ethylene content as presently claimed.

On the other hand, Sumitomo et al., which is drawn to propylene-ethylene block copolymer, disclose that the xylene soluble has a single relaxation time component and a relationship between relaxation time and ethylene content of $y<0.0014x^3-0.0897x^2-1.0593x+231.6$ where y is the relation time in msec and x is the ethylene content in weight % (col.5, lines 1-48).

The motivation for using propylene-ethylene block that possesses xylene soluble with such relaxation time is that the propylene-ethylene block copolymer has good impact strength and also a good balance between rigidity and impact strength (col.5, line 66-col.6, line 12).

In light of the motivation for using propylene-ethylene block copolymer which has xylene soluble possessing single relaxation time component and relationship between relaxation time and ethylene content disclosed by Sumitomo et al. as presently claimed, it therefore would have been obvious to one of ordinary skill in the art to use such propylene-ethylene block copolymer in EP 699711 in order to produce a composition with good impact strength as well as good balance between rigidity and impact strength, and thereby arrive at the claimed invention.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. '099 (U.S. 5,684,099) in view of Kamakura et al. (U.S. 5,543,454), Shimijo et al. (U.S. 6,011,102), Watanabe '114 (U.S. 4,621,114), and Sumitomo et al. (U.S. 6,201,090).

Watanabe et al. '099 disclose a resin composition for automobile parts comprising (i) propylene-ethylene block copolymer wherein the copolymer comprises propylene homopolymer which has stereoregularity index [mmmm] fraction, i.e. isotactic pentad fraction, of 98% or greater and 3-50% ethylene-propylene copolymer and possesses melt flow rate of 0.1-500 g/10 min and (ii) 0.05-0.5% based on amount (i) of nucleating agent such as sodium 2,2-methylenebis-(4,6-di-t-butylphenyl) phosphate. It is disclosed that the flexural modulus of the composition ranges from approximately 1432-1588 MPa (col.3, lines 16-32 and 42-46, col.7, lines 1-6, col.9, lines 27-36, 51-62, and 66, col.15, lines 55-58). It is noted that the composition of Watanabe et al. does not require the use of any ingredients that fall outside the scope of the presently claimed transitional language, "consisting essentially of".

Although there is no explicit disclosure of xylene insoluble or xylene soluble as presently claimed, it is well known as found in col.2, lines 42-43 and 56-57 of Kamakura et al. that for a

propylene-ethylene block copolymer comprising a propylene homopolymer portion and an ethylene-propylene copolymer portion, that the xylene insoluble is the propylene homopolymer portion and the xylene soluble is the ethylene-propylene copolymer portion. Thus, it is clear that Watanabe et al. '099 disclose xylene insoluble and xylene soluble as presently claimed.

Although there is no explicit disclosure of the elongation or Izod impact strength as presently claimed, given that Watanabe et al. '099 discloses composition identical to that presently claimed, i.e. comprising the same propylene-ethylene block copolymer and nucleating agent, it is clear that such composition would intrinsically possess the same elongation or Izod impact strength as presently claimed.

The difference between Watanabe et al. '099 and the present claimed invention is the requirement in the claims of (a) granulation, (b) melt flow rate, and (c) relaxation time of xylene soluble.

With respect to difference (a), while there is no explicit disclosure of granulation, it is noted that col.9, line 66 of Watanabe et al. '099 discloses that the composition is mixed using an extruder.

Watanabe '114, which is drawn to propylene composition comprising propylene-ethylene block copolymer, disclose that mixing such a composition in an extruder will result in granulation (col.8, lines 2-3).

In light of the disclosure of Watanabe '114, it is clear that Watanabe et al. '099 does in fact disclose granulation as presently claimed, and thus one of ordinary skill in the art would have arrived at the claimed invention.

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With respect to difference (b), Shimijo et al., which is drawn to propylene resin composition comprising propylene-ethylene block copolymer, disclose that such a composition has melt flow rate (MFR)of 15-25 g/10 min, wherein if the MFR is too low, a composition having good flowability and moldability cannot be obtained, while if the MFR is too high, a composition having good impact strength cannot be obtained (col.6, lines 4-9).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use composition in Watanabe et al. '099 which has MFR, including that presently claimed, in order that the composition have good flowability, moldability, and good impact strength, and thereby arrive at the claimed invention.

With respect to difference (c), while Watanabe et al. '099 discloses propylene-ethylene block copolymer comprising xylene soluble, there is no disclosure of the relaxation time and thus no disclosure that the relaxation time is a single component or related to the ethylene content as presently claimed.

On the one hand, given that Watanabe et al. '099 disclose a composition comprising propylene-ethylene block copolymer with same content of xylene soluble as presently claimed, it would have been natural for one of ordinary skill in the art to infer that the xylene soluble of Watanabe et al. '099 intrinsically possesses single relaxation time component and relationship between relaxation time and ethylene content as presently claimed.

On the other hand, Sumitomo et al., which is drawn to propylene-ethylene block copolymer, disclose that the xylene soluble has a single relaxation time component and a relationship between relaxation time and ethylene content of $y<0.0014x^3-0.0897x^2$ -

1.0593x+231.6 where y is the relation time in msec and x is the ethylene content in weight % (col.5, lines 1-48).

The motivation for using propylene-ethylene block that possesses xylene soluble with such relaxation time is that the propylene-ethylene block copolymer has good impact strength and also a good balance between rigidity and impact strength (col.5, line 66-col.6, line 12).

In light of the motivation for using propylene-ethylene block copolymer which has xylene soluble possessing single relaxation time component and relationship between relaxation time and ethylene content disclosed by Sumitomo et al. as presently claimed, it therefore would have been obvious to one of ordinary skill in the art to use such propylene-ethylene block copolymer in Watanabe et al. '099 in order to produce a composition with good impact strength as well as good balance between rigidity and impact strength, and thereby arrive at the claimed invention.

Response to Arguments

- 7. Applicants' arguments regarding Abe et al. (U.S. 5,484,824), EP 280297, and Endo et al. (U.S. 4,596,833) have been considered but are moot in view of the discontinuation of these references against the present claims.
- 8. Applicants' arguments filed 6/18/02 have been fully considered but, with the exception of arguments relating to Abe et al., EP 280297, and Endo et al., they are not persuasive.

Specifically, applicants argue that EP 699711 uses additional rubber component that is not required in the present claims.

However, it is noted that EP 699711 is only used to rejection present claims 1-3 which recite open language, i.e. "comprising", and thus are open to the inclusion of other ingredients including additional rubber components as disclosed by EP 699711.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kasahara et al. (U.S. 4,565,844) disclose composition comprising propylene-ethylene block copolymer and nucleating agent, however, there is no disclosure of the melt flow rate of the composition or the block copolymer, the [mmmm] fraction of the xylene insoluble, specific nucleating agent, relaxation time, tensile elongation, or Izod impact strength as presently claimed.

EP 265075 disclose propylene resin composition comprising propylene-ethylene block copolymer and nucleating agent as presently claimed, however, there is no disclosure of the xylene soluble/insoluble, [mmmm] fraction of xylene insoluble, elongation, or relaxation time as presently claimed.

McCullough et al. (U.S. 5,362,782) disclose composition comprising propylene copolymer and nucleating agent, however, there is no disclosure of specific nucleating agent as presently claimed and the flexural modulus and melt flow rate of the composition fall outside the scope of the present claims.

EP 953602 disclose composition comprising propylene-ethylene block copolymer and nucleating agent as presently claimed, however, the melt flow rate of the composition falls

outside the scope of the present claims and there is no disclosure of melt flow rate of the block

copolymer, [mmmm] fraction of xylene insoluble, or relation time as presently claimed.

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The

examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular

communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho

Leeve Shahr

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Examiner

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